

What Is Claimed Is:

1. A driveline for a vehicle comprising:
a differential transmission placed eccentrically relative to the vehicle centerline;
a first inboard joint coupled to one side of
5 said differential transmission;
a first interconnecting shaft coupled to said first inboard joint and to a first outboard joint;
a linkshaft coupled to said differential transmission and to a second inboard joint;
10 a second interconnecting shaft coupled to said second inboard joint and a second outboard joint;
a bearing for supporting said linkshaft; and
a composite linkshaft bracket used to support
said bearing.
- 15 2. The driveline of claim 1, wherein said composite linkshaft bracket comprises an upper portion and a lower portion, wherein said upper portion and said lower portion, when coupled, surround and support said bearing.
- 20 3. The driveline of claim 2, wherein said upper bracket has a plurality of mounting holes, a plurality of raised ribbed regions, a pair of mounted studs, and a spherical region.
- 25 4. The driveline of claim 3, wherein said upper portion of said composite linkshaft bracket is coupled to an engine block or ladderframe of the vehicle through said plurality of mounting holes.

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5. The driveline of claim 3, wherein said lower portion has a spherical region and an inlet region corresponding to each of said studs used to couple said lower region to said upper region.

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5. The driveline of claim 1, wherein said upper portion of said composite linkshaft bracket is formed of a polymer material that has a heat distortion temperature of greater than 180 degrees Celsius.

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7. The driveline of claim 6, wherein said lower portion of said composite linkshaft bracket is formed from a material selected from the group consisting of said polymer material and metal.

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8. The driveline of claim 7, wherein said polymer material comprises a fiber reinforced heat resistant aliphatic polyamide.

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9. The driveline of claim 7, wherein said polymer material comprises Stanyl® with 30% glass fiber reinforcement.

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10. A composite linkshaft bracket used to support a bearing supported linkshaft in a vehicle driveline comprising:

a composite upper portion having a plurality of mounting holes, a pair of mounted studs, and an upper spherical region; and

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25 a lower portion coupled to said upper portion, said lower portion having a lower spherical region and a pair of inlets, wherein each of said pair of inlets couples with a corresponding one of said pair

of mounted studs to surround and support the bearing supported linkshaft.

11. The composite linkshaft bracket of claim 10, wherein said composite upper portion is formed of a 5 polymer material that has a heat distortion temperature of greater than 180 degrees Celsius.

12. The composite linkshaft bracket of claim 11, wherein said lower portion of said composite linkshaft bracket is formed from a material selected 10 from the group consisting of said polymer material and metal.

13. The driveline of claim 12, wherein said polymer material comprises a fiber reinforced heat resistant aliphatic polyamide.

14. The driveline of claim 12, wherein said 15 polymer material comprises Stanyl® with 30% glass fiber reinforcement.

15. The driveline of claim 10, said upper composite portion further comprising a plurality of 20 raised ribbed regions used to increase the strength of the upper composite portion.

16. A method for decreasing weight in a transversally mounted driveline comprising:

25 providing a composite linkshaft bracket having a composite upper portion and a lower portion, said composite upper portion having a heat distortion temperature of at least 180 degrees Celsius;

coupling said composite upper portion to said lower portion of said composite linkshaft bracket such that said composite linkshaft bracket surrounds a bearing used to support a linkshaft in the
5 transversally mounted driveline; and
coupling said composite linkshaft bracket to a vehicle ladderframe or engine block.

17. The method of claim 16, wherein providing a composite linkshaft bracket comprises
10 providing a composite linkshaft bracket having a 30% glass reinforced polyamide composite upper portion and a lower portion, said lower portion selected from the group consisting of a 30% glass reinforced polyamide composite lower portion and a stamped metal lower
15 portion, wherein said 30% glass reinforced polyamide composite upper portion and said lower portion has a heat distortion temperature of at least 180 degrees Celsius.

18. The method of claim 16, wherein coupling
20 said composite upper portion to said lower portion comprises coupling a stud on said composite upper portion within each of a pair of inlets on said lower portion such that said composite linkshaft bracket surrounds a bearing used to support a linkshaft in the
25 transversally mounted driveline.

19. The method of claim 16, wherein coupling said composite linkshaft bracket to a vehicle ladderframe or engine block comprises coupling said composite upper portion of said composite linkshaft

bracket to a vehicle ladderframe or engine block through a plurality of mounting holes.

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